

**ANALYSIS OF APPLICATION - BASED BILL TRANSACTION
INFORMATION SYSTEM TO INCREASE CUSTOMER PAYMENT AWARENESS
(CASE STUDY OF PDAM TIRTAULI PEMATANGSIANTAR CITY)**

¹**Marintan Saragih, Lecturer of Accounting Study Program, Simalungun University**

Email: intandame@yahoo.com

²**Vitryani Tarigan, Lecturer of Accounting Study Program, Simalungun University**

Email: vitry_tarigan@yahoo.com

*Correspondence Author: intandame@yahoo.com

ABSTRACT

This study aims to analyze the accounting information system of cash receipts and expenditures at PDAM Tirtauli Pematangsiantar and assess the effectiveness of its implementation. Accounting information systems have an important role in managing financial data into accurate and usable information in decision-making. The research method used is a descriptive method with a qualitative approach. Data collection techniques are carried out through interviews, observations, and documentation. The results of the study show that the accounting information system for cash receipts and cash expenditures at PDAM Tirtauli has clear procedures and runs according to the provisions. However, in its implementation, there are still several weaknesses such as suboptimal separation of duties, lack of supervision, and documentation that is not well organized. This shows that internal control has not been running optimally. Therefore, improvements are needed in the system in order to increase the effectiveness and efficiency of cash management.

Keywords: Accounting Information System, Cash Receipts, Cash Expenditures, Internal Control

ABSTRAK

Penelitian ini bertujuan untuk menganalisis sistem informasi akuntansi penerimaan dan pengeluaran kas di PDAM Tirtauli Pematangsiantar dan menilai efektivitas implementasinya. Sistem informasi akuntansi memiliki peran penting dalam mengelola data keuangan menjadi informasi yang akurat dan dapat digunakan dalam pengambilan keputusan. Metode penelitian yang digunakan adalah metode deskriptif dengan pendekatan kualitatif. Teknik pengumpulan data dilakukan melalui wawancara, observasi, dan dokumentasi. Hasil penelitian menunjukkan bahwa sistem informasi akuntansi penerimaan dan pengeluaran kas di PDAM Tirtauli memiliki prosedur yang jelas dan berjalan sesuai dengan ketentuan. Namun, dalam implementasinya, masih terdapat beberapa kelemahan seperti pemisahan tugas yang suboptimal, kurangnya pengawasan, dan dokumentasi yang kurang terorganisir. Hal ini menunjukkan bahwa pengendalian internal belum berjalan optimal. Oleh karena itu, perlu dilakukan perbaikan pada sistem tersebut untuk meningkatkan efektivitas dan efisiensi pengelolaan kas

Kata Kunci: Sistem Informasi Akuntansi, Penerimaan Kas, Pengeluaran Kas, Pengendalian Internal

I. INTRODUCTION

The development of information technology in the modern era today has brought significant changes in various fields, including in the world of business and organizations. Every organization is required to be able to manage information quickly, precisely, and accurately to support its operational activities. One of the systems that plays an important role in this is the accounting information system, which is used to process financial data into information that is useful for management.

Accounting information systems have a strategic role in providing relevant and reliable financial information. The information generated is used as a basis for decision-making, planning, and control of organizational activities. Therefore, an accounting information system must be well designed to be able to produce quality information, which is accurate, timely, and accountable.

Cash is one of the most important assets in an organization because of its liquid nature and easy to use in various transactions. The high rate of cash turnover causes the risk of misuse and recording errors to be greater. Therefore, a good accounting information system is needed and supported by adequate internal controls to maintain cash security and ensure that every transaction is recorded correctly.

PDAM Tirtauli Pematangsiantar as a regional company engaged in the provision of clean water has quite high cash receipt and expenditure activities. Every day there are payment transactions from customers and various operational expenses of the company. This requires a structured system and good control so that cash management can run effectively and efficiently.

However, in its implementation, there are still several problems in the running system, such as the lack of separation of tasks between parts, supervision that is not optimal, and documentation that is not well organized. This condition can pose a risk of recording errors, delays in reporting, and even the potential for fraud that can harm the company.

Based on these problems, this study was conducted to analyze the accounting information system of cash receipts and expenditures at PDAM Tirtauli Pematangsiantar and assess the effectiveness of its implementation. The results of this study are expected to provide an overview of the condition of the running system and become an evaluation material in improving the quality of accounting information systems and internal control in the company.

II. THEORETICAL STUDY

System

A system is a set of elements or components that are interconnected and work together to achieve a certain goal. In a system, there are key components such as inputs, processes, and outputs that are interrelated to produce the expected result. In addition, the system also has boundaries, environments, and control mechanisms that function to keep the system running in accordance with the goals that have been set. With the interconnectedness between these components, the system is able to work in a structured and directed manner in achieving organizational goals. According to (Laudon & Laudon, 2021), a system is a collection of interconnected components that work together to achieve a specific goal through the process of input, processing, and producing output. Meanwhile, (Hartono, 2017) stated that a system is a working network of interconnected procedures to complete a certain goal. Another opinion was put forward by (Susanto, 2018) who explained that a system is a collection of parts or subsystems that interact with each other and work together in a process to achieve a common goal.

In the latest research developments, accounting information systems are also associated with improving organizational performance. Research (Sari & Putra, 2022) states that the implementation of a good accounting information system has a positive effect on the quality of financial reports. Other research conducted (Hidayat, 2023) shows that an effective accounting information system is able to increase operational efficiency and minimize errors in recording transactions. Apart from that, research conducted (Nugroho & Lestari, 2024) revealed that an accounting information system supported by adequate information technology can increase transparency and accountability in financial management.

Based on this understanding, it can be concluded that a system is an integrated unit consisting of various components that interact with each other and have their own roles in achieving certain goals. A good system must have a clear structure, an organized process flow, and be supported by an effective control mechanism in order to run optimally. Thus, the existence of the system is very

important in supporting organizational activities, including in the management of the accounting information system for cash receipts and expenditures.

Information Systems

An information system is a system designed to manage data into useful information for its users. This system involves various components such as people, technology, procedures and data which interact with each other to produce quality information and support decision making in the organization. According to (Laudon & Laudon, 2021), an information system is a collection of interconnected components that function to collect, process, store and distribute information to support decision making, coordination and control within an organization.

Information is the result of data processing that has been processed so that it has meaning and can be used by users in decision-making. Data that previously did not have meaning will become information after going through a systematic processing process. Good information must have adequate quality, such as accurate, relevant, and timely, so that it can provide benefits to its users. With quality information, organizations can carry out their activities more effectively and efficiently.

According to (Laudon & Laudon, 2021), information is data that has been processed so that it has meaning and is useful for the recipient in decision-making. Meanwhile, (Susanto, 2018) stated that information is the result of data processing that provides meaning and value for its users. Another opinion was put forward by (Hartono, 2017) who stated that information is data that has been processed into a form that is more useful and more meaningful for the recipient.

Research by (Siregar & Harahap, 2022) states that a system is a combination of components that are interconnected and function together to process input into output that is of value for the organization. Another research by (Pratama, 2023) explains that a good system must have a clear structure, a defined process flow, and a control mechanism that is able to ensure the system runs effectively and efficiently.

Based on this understanding, it can be concluded that information is the result of a data processing process that has useful value for its users, especially in supporting decision-making. Quality information will help management in planning, controlling, and evaluating organizational activities. Therefore, information is one of the important components in an accounting information system, especially in the management of cash receipts and expenditures.

Accounting Information System

An accounting information system is a system used to manage financial data into useful information for users, especially in decision-making. This system includes the process of collecting, recording, processing, and presenting financial transaction data. In an organization, the accounting information system plays an important role in providing accurate, relevant, and timely information, so that it can support operational activities and management control. According to (Romney & Steinbart, 2020), an accounting information system is a system that collects, records, stores, and processes data to produce information for decision-making. Meanwhile, (Susanto, 2018) stated that an accounting information system is a collection of interconnected subsystems in processing financial transaction data into useful information. In addition, (Laudon & Laudon, 2021) explained that an accounting information system is part of an information system that functions to support control and decision-making in an organization.

Apart from that, in recent research, information systems are also seen as an important factor in improving organizational performance. Research by (Sari & Nugroho, 2022) states that an effective information system is able to improve the quality of information and work efficiency in the organization. Other research by (Hidayat & Pratama, 2023) shows that the implementation of a good information system has a significant influence on the speed and accuracy of managerial decision making. Furthermore, research by (Rahman, 2021) explains that the information system that Integrated can help organizations improve operational performance and competitiveness.

Based on this understanding, it can be concluded that an accounting information system is a unified system that is integrated in managing financial data into quality information. This system must

be supported by components such as people, procedures, technology, and internal controls in order to run effectively and efficiently. With a good accounting information system, organizations can increase the reliability of financial information and support the management of cash receipts and expenditures more optimally

Cash Receipt System

A cash receipt system is a system used to manage all incoming cash transactions in an organization. This system includes processes ranging from receiving payments, recording transactions, to financial reporting. Cash receipts can come from various sources, such as customer payments, cash sales, or other receipts. Therefore, the cash receipt system must be well designed so that every transaction can be recorded accurately and accountable. In its implementation, the cash receipt system involves several interrelated procedures, such as receiving payments, making proof of transactions, recording in journals, and depositing to banks. Each of these stages must be carried out systematically and in accordance with the established procedures. In addition, good internal controls, such as separation of duties, authorization, and supervision, are needed to avoid errors and fraud in cash management.

According to (Mulyadi, 2016), the cash receipt system is a system designed to handle cash receipt transactions effectively and efficiently through predetermined procedures. Meanwhile, (Romney & Steinbart, 2020) stated that the cash receipt system is part of an accounting information system that functions to collect, record, and process incoming cash transaction data into information that is useful for decision-making. Cash receipts accounting information system can be understood as a series of procedures, documents, records, functions and internal controls used to manage incoming cash transactions so that they are recorded completely, accurately, safely and accountably. In service companies such as PDAM, this system is very necessary because cash receipts come from routine activities that take place continuously, such as payments for water bills, costs for installing new connections, fines and other receipts.

Based on this understanding, it can be concluded that the cash receipt system is a series of procedures that are integrated in managing cash inflows effectively, efficiently, and safely. A good system must be able to guarantee that each cash receipt has been properly recorded, equipped with valid evidence, and supported by adequate internal controls to improve the reliability of financial information.

Cash Disbursement System

The cash expenditure system is a system used to manage outgoing cash transactions in an organization. This process includes payment requests, authorization, payment execution, and transaction recording. This system aims to ensure that every cash expenditure is carried out in accordance with established procedures. According to Mulyadi (2016), the cash disbursement system is a system used to regulate and control cash disbursements in accordance with procedures. This indicates that any expenditure must be authorized and supported by complete documents. Thus, the cash expenditure system can be concluded as a system that manages cash outflow in a structured and controlled manner. A good system will be able to minimize the risk of errors and keep the company's assets safe.

Objectives of the Accounting Information System Cash Expenditures

The cash disbursement accounting information system aims to ensure that every cash disbursement is carried out based on legitimate needs, obtains proper authorization, is recorded completely and reported correctly. Apart from that, this system also aims to protect company cash from misuse, recording errors and expenditures that do not comply with procedures. Mulyadi (2023) emphasized that the accounting system not only aims to provide financial information, but also improves accounting control and internal checks. Krismiaji (2020) also states that accounting information systems must support the organization's control function. Thus, the purpose of the cash disbursement system is not only administrative, but also supervisory and asset protection.

Elements of Accounting Information Systems Cash Expenditures

1. Related Functions

The first element in the cash disbursement accounting information system is the functions related to the cash disbursement process. These functions generally include the section that submits requests for payment, the section that checks documents, the finance or cash section that makes payments, and the accounting section that carries out recording. Separation of functions is important to prevent duplication of tasks and support internal control. Mulyadi (2023) emphasized that the division of functions in the accounting system is necessary to maintain the effectiveness of internal control.

2. Documents Used

The second element is the document used as a basis for implementing and recording cash disbursements. These documents can be in the form of proof of cash out, vouchers, payment requests, receipts, invoices, checks, proof of transfer, and other supporting documents.

3. Accounting Records Used

The third element is accounting records which are used to record cash disbursement transactions. These records generally include a cash disbursement journal, cash ledger, accounts payable ledger, and cash disbursement report. Accounting records function to classify and summarize transactions so that they can be processed into information needed by management. Krismiaji (2020) explains that accounting information systems process transaction data into information and reports that organizations need.

4. Cash Disbursement Procedures

The fourth element is the cash disbursement procedure, namely the sequence of activities from when the need for payment arises until the transaction is recorded and reported. This procedure generally starts from requesting payment, examining supporting documents, authorization by authorized officials, making payments, recording transactions, and preparing cash disbursement reports. Mulyadi (2023) states that the accounting system is structured around forms, records and reports which are organized in certain procedures. Therefore, cash disbursement procedures must be prepared clearly so that each payment takes place in an orderly manner and can be monitored.

5. Internal Control in Cash Disbursements

The fifth element is internal control implemented in the cash disbursement system. This control aims to protect the company's cash from unauthorized expenditure, recording errors and abuse of authority. These forms of internal control include separation of duties, document verification, payment authorization, use of checks or transfers for certain payments, reconciliation and periodic checks. Mulyadi (2023) emphasized that the accounting system must support accounting control and internal checks. Thus, internal control is an element that really determines the quality of the cash disbursement system.

Internal Control

Internal control is a process designed to ensure that the organization's activities run according to the objectives. Internal control includes separation of duties, authorization, documentation, and effective supervision. According to COSO (2013), internal control is a process that provides confidence in the achievement of organizational goals. Mulyadi (2016) also stated that internal control aims to maintain the company's assets and ensure the reliability of financial statements. Thus, internal control has an important role in accounting information systems, especially in the management of cash receipts and expenditures. Good control will help the organization in increasing operational effectiveness and efficiency.

Internal Control Objectives

The purpose of internal control can be explained in the following narrative. Internal control aims to safeguard company assets, ensure the reliability of accounting data, increase operational efficiency, and encourage compliance with management policies and applicable regulations. If these goals are achieved, the organization will be better able to carry out its activities effectively and accountably.

Internal Control Components

Referring to the COSO framework, internal control consists of five components, namely environmental control, risk assessment, control activities, information and communication, and monitoring. The official COSO website and the framework's summary document demonstrate the use of these five components as a basic structure for internal control evaluation. The control environment is related to management's attitude and commitment to integrity, ethics and supervision. Risk assessment is related to the identification and analysis of risks that may hinder the achievement of organizational goals. Control activities are policies and procedures designed to reduce risk. Information and communication relate to the provision and availability of information needed for control to run. Monitoring is carried out to assess whether internal controls remain effective over time.

Internal Control over Cash Receipts and Disbursements

In the cash receipts and disbursements system, internal control must be carried out strictly because the controlled object is the most liquid asset. Common forms of control include function verification, use of documents with printed serial numbers, authorization of transactions, regular cash deposits to the bank, reconciliation between physical cash and accounting records, and surprise checks. The better the internal controls implemented, the smaller the possibility of errors and deviations.

Previous Research

Previous research is one of the important parts of a research that is used as a comparison and reference material to support the research conducted. With previous research, researchers can find out the progress of previous research, as well as find similarities and differences with the research being conducted. In addition, previous research also helps in strengthening the theoretical foundation and providing an overview of research results that are relevant to the topic of accounting information systems of cash receipts and expenditures.

Several previous studies have shown that accounting information systems have an important role in increasing the effectiveness of corporate financial management. Previous research results generally state that a good cash receipt and expenditure system must be supported by clear procedures, strict separation of duties, and adequate internal controls. However, there are still many weaknesses found in the implementation of the system, such as lack of supervision, untidy documentation, and the existence of duplicate tasks that can increase the risk of errors and fraud.

Based on the results of the previous research, it can be concluded that an effective accounting information system for cash receipts and expenditures is highly dependent on the implementation of good internal controls. This research has similarities with the previous research, namely analyzing the accounting information system of cash receipts and expenditures, but has differences in the object of research, namely PDAM Tirtauli Pematangsiantar. Thus, this research is expected to contribute to complementing previous research and provide a more specific picture of the application of accounting information systems in regional companies

Research Object

The research object is something that is the main focus in a study. The object of this research is the accounting information system for cash receipts and disbursements at the PDAM Tirta Uli Pematangsiantar Office. This research focuses on analyzing the elements of the accounting information system which include related functions, documents used, accounting records, cash receipt procedures, cash disbursement procedures, as well as internal controls applied in cash management.

Frame of Mind

The accounting information system for cash receipts and expenditures is an important part of the company's financial management. This system functions to manage cash inflows and outflows in a structured manner through the process of recording, processing, and reporting financial transactions. In its implementation, the cash receipt system includes the process of receiving payments from customers to recording transactions, while the cash expenditure system includes the process of

requesting payments, authorization, payment execution, and recording. The two systems must run in an integrated manner in order to produce accurate and reliable financial information.

In order for the accounting information system to run effectively, adequate internal control is needed. Internal control plays a role in ensuring that every transaction is carried out according to procedures, is authorized by the authorities, and is supported by complete evidence. In addition, internal control also includes the separation of duties between parts, effective supervision, and orderly documentation to minimize the risk of errors and fraud in cash management.

In this study, the accounting information system for cash receipts and expenditures at PDAM Tirtauli Pematangsiantar was analyzed to determine the level of effectiveness. The results of the analysis show that although the system has clear procedures, there are still weaknesses in the separation of tasks, supervision, and documentation. Therefore, the relationship between the cash receipt system and cash expenditure with internal controls is an important factor in increasing the effectiveness of the system. With improvements in internal control, it is hoped that the accounting information system can run more optimally and be able to produce more reliable financial information.

There is a schematic framework of thought that can be seen in the following image:

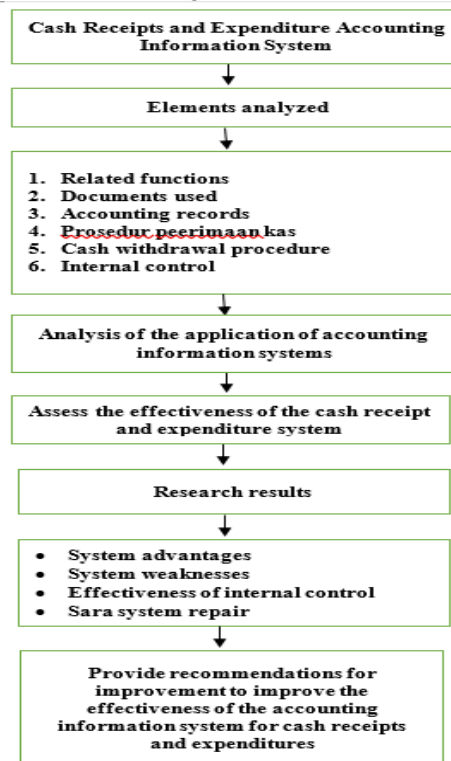


Figure 1. Conceptual Framework

III. RESEARCH METHODS

Types and Approaches to Research

This study uses a descriptive method with a qualitative approach. This method is used to provide a systematic overview of the accounting information system for cash receipts and expenditures applied to PDAM Tirtauli Pematangsiantar. The qualitative approach was chosen because this research aims to deeply understand the processes and procedures that run in the organization. The qualitative descriptive method allows researchers to identify, describe, and analyze the condition of the existing system without manipulating the variables being studied. With this method, researchers can obtain more detailed information about the implementation of accounting information systems in cash management. Thus, the use of this method is expected to provide accurate

research results and in accordance with the actual conditions in the field, so that it can be used as a basis for evaluating the running system.

Research Location and Time

This research was carried out at PDAM Tirtauli Pematangsiantar, which is a regional company engaged in the provision of clean water. The selection of the research location is based on the existence of cash receipts and expenditure activities that are quite high and relevant to the topic of the research being conducted.

The research time was conducted during a certain period adjusted to the needs of data collection. During the research process, the researcher conducts direct observations and interviews with related parties to obtain the required data. With the right location and time, it is hoped that the data obtained can describe the actual condition of the accounting information system, so that the results of the research become more valid and accountable.

Research Focus

In this study, accounting information systems have a very important role in managing and controlling financial transactions, especially those related to cash receipts and expenditure. The implementation of a good system is expected to increase the accuracy, efficiency, and reliability in the presentation of financial statements. Therefore, the researcher focused the study on several main components, namely:

1. Cash Receipt Accounting Information System
2. Cash Expenditure Accounting Information System
3. System Effectiveness

Data Types and Sources

The data used in this study is classified into two types based on the source, namely:

1. Primary data

Primary data is data obtained directly from the original or first source through interactions in the field. In this study, primary data was collected through direct observation of service and transaction processes, as well as the results of in-depth interviews with informants consisting of company management, operational staff, and customers. This data is the main basis for answering the formulation of research problems.

2. Data Seconds

Secondary data is supporting data obtained through literature studies, corporate documents, and relevant official archives. This data includes organizational structure, company profiles, financial statements, customer count data, as well as various theories and concepts from books, scientific journals, and articles related to information systems, digital payments, and consumer behavior.

Data collection technique

In this research, the data collection techniques used are as follows:

1. Observation

Observation is a data collection technique carried out by directly observing the object under study. In this research, observations were made to see directly how the accounting information system for cash receipts and disbursements is implemented at the PDAM Tirta Uli Pematangsiantar Office, starting from cash receipt procedures, cash disbursement procedures, use of documents, to the internal controls implemented.

2. Interview

Interviews are data collection techniques carried out by means of direct questions and answers with parties related to the research. In this research, interviews were conducted with employees or departments related to cash receipts and disbursements, such as the finance department, cashiers, accounting, or other parties who were deemed to know the accounting information system implemented at the PDAM Tirta Uli Pematangsiantar Office.

3. Documentation

Documentation is a data collection technique that is carried out by collecting and studying documents related to the research object. These documents can be in the form of organizational structures, proof of cash receipts, proof of cash disbursements, journals, cash reports, forms, and other files related to the accounting information system for cash receipts and disbursements.

Research Informant

Research informants are parties who provide the information needed by researchers. In this research, informants were selected purposively, that is, they were selected based on the consideration that the informants knew, understood and were directly involved in the accounting information system for cash receipts and disbursements at the PDAM Tirta Uli Pematangsiantar Office.

The informants in this study can consist of:

1. Head of finance or financial administration
2. Accounting Officer
3. Cashier or payment receipt officer
4. Officers who handle cash withdrawals
5. Other parties who are relevant and considered relevant to the research

Data Collection Techniques

To obtain accurate and comprehensive data, this study uses several data collection techniques as follows:

1. Observation

Observation is a data collection technique by making direct observations of the research object. In this study, the researcher conducted direct observation of the service process, payment transaction flow, customer queue, and the use of payment applications to get a real picture of the situation that occurs in the field.

2. In-depth Interview

The interview was conducted through an oral question and answer process between the researcher and the informant. The interview guidelines are structured and semi-structured to explore in-depth information about the perceptions, experiences, and opinions of informants regarding the implementation of the payment system, factors affecting usage, and obstacles faced.

3. Documentation

Documentation techniques are used to collect data sourced from important records, images, photos of activities, and official company archives that support and strengthen the data from observations and interviews.

Data Analysis Techniques

The data analysis technique used in this research is qualitative descriptive analysis. This analysis was carried out by collecting data, grouping data, describing data, then comparing theory and practice applied at the PDAM Tirta Uli Pematangsiantar Office. The data analysis steps in this research are as follows:

1. Data collection

The researcher collected data through observations, interviews, and documentation related to the accounting information system of cash receipts and expenditures.

2. Data reduction

The data that has been obtained is then selected, summarized, and focused on matters related to the research, namely related functions, documents, accounting records, procedures, and internal controls.

3. Data presentation

The data that has been reduced is then compiled and presented in the form of a descriptive description to make it easier to understand.

4. Data analysis and interpretation

The data that has been presented is analyzed by comparing real conditions in the field with the theory of accounting information systems of cash receipts and expenditures.

5. Conclusion drawing

After the data was analyzed, the researcher drew conclusions about how to implement the accounting information system for cash receipts and expenditures at the PDAM Tirta Uli Pematangsiantar Office and assess the effectiveness of the system.

IV. RESULTS AND UNDERSTANDING

Research Results

Based on the research results, it is known that the recording of cash disbursements is carried out by the finance department based on existing transaction evidence. Proof of the transaction can be in the form of a note, receipt, invoice, payment order or other relevant supporting documents. The existence of proof of this transaction is very important because it functions as a basis for verification that the cash disbursement actually occurred and is in accordance with the company's needs. Apart from that, this documentary is also a control tool in preventing unauthorized expenditure or misuse of funds.

Every cash expenditure that occurs will be recorded in detail and in detail for financial reporting purposes. This recording includes various important information, such as transaction date, amount of expenditure, type of expenditure, purpose of use of funds, as well as the party receiving the funds. The data that has been recorded will then be classified and processed further to produce financial reports, such as cash flow reports, profit and loss reports, and other reports required by management in the decision-making process.

The process of recording cash disbursements is carried out after all administrative stages have been fulfilled, including approval from the authorized parties and disbursement of funds that have been carried out. After that, the finance department will input data into the company's accounting system, either manually or through the available computerized system. Furthermore, supporting documents will be archived systematically so that they can be easily found again if necessary, especially during the audit or internal inspection process.

Apart from that, recording of cash disbursements is also carried out periodically and continuously, so that the company can monitor financial conditions in real time. By regularly recording, management can find out the amount of expenditure incurred and evaluate the efficiency of use of funds. This is very important in maintaining the company's financial stability and ensuring that the expenditure made truly provides benefits to the company.

However, in its implementation there are still several obstacles, such as manual processes in recording and delays in inputting data. This condition has the potential to cause recording errors (human error), data discrepancies, and reduce work efficiency. Apart from that, the lack of integration between the systems used can also cause data duplication or differences in information between one part and another.

Thus, it can be concluded that the recording of cash disbursements at PDAM Tirtauli has been carried out quite well because it is supported by complete transaction evidence and a systematic recording process. However, to achieve a more optimal level of effectiveness, companies need to continue developing systems and increasing supervision over the recording process, so that the resulting financial information can be more accurate, timely and reliable. Apart from that, continuous improvements in the recording system will also have a positive impact on improving financial performance and the quality of managerial decision making in the future.

Table 1. Cash Receipt Analysis

SIA Elements	Theory (Mulyadi)	Practice in PDAM	Compatibility	Remarks
Function	Must be separated	There is a Trap	Inappropriate	Risk/Fraud
Documents	Sequentialnumbered	There is proof ofpayment	Conform	Need reinforcement

Notes	Systematic	Computerized	Conform	Good
Production	Clear & sequential	Already running	Conform	Effective
Control	There isreconciliation	Not routine yet	Less	Weak control

Based on the results of interviews that have been conducted, it is known that PDAM Tirtauli Pematangsiant has used a computerized system in cash management. The application of this computerized system aims to increase efficiency, speed and accuracy in the process of recording and processing financial data. With this system, it is hoped that all cash receipt and disbursement transactions can be recorded in a more structured manner, stored properly, and easily accessed again if necessary.

This is as expressed in the results of interviews with Mr Budiman, S.E. Tanjung as Head of Cash, namely: "Currently, cash management at PDAM Tirtauli already uses a computerized system, where every transaction, both receipts and expenditures, is recorded through the system. However, in its implementation there are still several processes that are carried out manually, especially when inputting transaction data by officers."

The cash expenditure system at PDAM Tirtauli is carried out through several stages, namely payment requests, authorization, payment execution, and transaction recording. Any cash expenditure must be supported by valid documents. Overall, the cash disbursement system has run quite well, but there are still shortcomings in terms of documentation and supervision. This can affect the reliability of the system in generating financial information.

Table 2. Analysis of cash expenditure

SIA Elements	Theory (Mulyadi)	Practice in PDAM	Compatibility	Remarks
Function	Separate	Quite separate	Conform	Good
Documents	Complete	There is proof of cash outflow	Conform	Adequate
Otoritas	Mandatory	Already there	Conform	Good
Procedure	Systematic	Already running	Conform	Effective
Control	Strict	Not yet maximum	Inappropriate	Needreinforcement

The cash disbursement system at PDAM Tirtauli Pematangsiantar basically has clear procedures and a fairly good permit system. Every cash disbursement made by the company must go through predetermined stages, starting from submitting a request for funds, audit by the finance department, to approval by the management. This process shows that the company has implemented an internal control mechanism which aims to ensure that every cash disbursement is carried out in a manner, planned and in accordance with operational needs.

Apart from that, the existence of approval from the leadership before the disbursement of funds is carried out shows that the permit system has worked well. This is important to prevent cash expenditures that are not in accordance with company policy and to ensure that every use of funds has gone through careful consideration. Thus, it can be said that the cash disbursement system at PDAM Tirtauli has generally been running well and is able to support the company's operational activities.

However, based on the research results, there are still several weaknesses in the implementation of the system. One of the weaknesses found was in the documentation aspect which was not yet fully optimal, where there were still documents which had not been arranged neatly or had not been documented completely. Apart from that, supervision of the cash disbursement process is also not optimal, so there is still the potential for errors or discrepancies in recording and executing transactions.

Separation of functions that is not yet optimal can be seen from the existence of several tasks that are combined with certain parts, thus potentially giving rise to the risk of errors or deviations. Ideally, each function in cash management, such as receiving, recording and monitoring, is carried out by a different party to create a stronger and more effective internal control system.

On the other hand, the authorization system at PDAM Tirtauli is running well, where every cash disbursement transaction must receive approval from the leadership before funds are disbursed. This shows that the company has implemented a control mechanism that is capable of controlling cash outflows, so as to minimize the occurrence of expenditures that are not in accordance with company policy. Furthermore, from the documentation aspect, the company has quite complete transaction evidence, such as notes, receipts and proof of payment. These documents are an important basis for financial reporting and processes. Although there are still some deficiencies in the neatness of filing, in general the available documentation is able to support the process of financial control and accountability.

Apart from that, from a supervisory aspect, although there are still several weaknesses in its implementation, the company has carried out a supervisory function over cash receipt and disbursement activities. This supervision is carried out through audits by related departments and through a periodic evaluation process of the resulting financial reports. By considering all these aspects, it can be concluded that in general the internal control system at PDAM Tirtauli is running well and can be said to be relatively optimal in supporting the company's cash management. This can be seen from the existence of clear procedures, an effective permit system, and adequate documentation. The system implemented has been able to reduce the risk of errors and support the smooth running of the company's operational activities.

However, to achieve a more optimal level of internal control, the company still needs to carry out continuous improvements and development, especially in strengthening the separation of functions, increasing the neatness of documentation, and strengthening internal control. With these improvements, it is hoped that the system which is already running well can become more perfect and be able to provide a greater contribution to improving the company's financial performance.

The following are the results of the internal control analysis:

Table 3. Internal Control (Coso)

Components	Conditions	Rating
Control Environment	Pretty good	Conform
Risk assessment	Not yet formal	Inappropriate
Control Effectiveness	There	Conform
Information & communication	Good	Conform
Monitoring	Weak	Inappropriate

Discussion

Analysis of the Cash Receipt and Expenditure Information System at the PDAM Tirtauli Pematangsiantar Office Cash Receipt System

Based on the results of the research, the cash receipt system at PDAM Tirtauli Pematangsiantar has a fairly clear and structured procedure. The process starts from customer payments, receipt by the cashier, transaction recording, to reporting to the finance department. Each transaction has also been supported by a valid proof of payment, so that in general the system has run according to the established procedures. When compared to the theory of accounting information systems, a good cash receipt system must have clear procedures, supported by adequate documents, and systematic recording. This condition shows that the system applied to PDAM Tirtauli has met most of these criteria. However, there are still weaknesses in terms of separation of duties, where there are still duplicates of tasks in some parts that can increase the risk of errors and fraud.

In addition, supervision of the cash receipt process is also still not optimal. This shows that although the system has been running well, the internal controls are not yet fully effective. Therefore, it is necessary to improve the separation of duties and supervision so that the cash receipt system can run more optimally and safely.

Cash Withdrawal System

The cash disbursement system at PDAM Tirtauli Pematangsiantar is carried out through several stages, namely payment requests, authorization, payment execution, and transaction recording. Any cash expenditure must be supported by complete documents and approved by the authorities. This shows that the company has implemented quite good procedures in managing cash expenses.

In theory, a good cash expenditure system should have strict controls, especially in terms of authorizations and documentation. The results of the study show that the authorization aspect at PDAM Tirtauli has gone well, where every transaction has been approved. However, in terms of documentation, there are still shortcomings, such as documents that have not been neatly organized.

In addition, supervision of cash expenditure also needs to be improved. Lack of supervision can lead to potential errors in recording and misuse of cash. Therefore, there is a need for improvements in the supervision and document arrangement system so that the cash expenditure system can run more effectively and efficiently. Comparative Analysis of Online and Offline Payments

Internal Control

Internal control is an important part of the accounting information system for cash receipts and expenditures. Based on the results of the research, internal control at PDAM Tirtauli includes separation of duties, authorization, documentation, and supervision. These four elements play a very important role in maintaining asset security and the reliability of financial information.

The results of the study show that the internal controls have gone quite well in terms of authorization, where every transaction has been approved by the authorities. However, there are still weaknesses in the separation of duties, where some employees are still concurrent with duties. This is not in accordance with the principle of internal control which requires a separation of functions to minimize the risk of errors and fraud.

In addition, documentation and supervision have also not run optimally. Documents that are not well organized and lack of oversight can affect the effectiveness of the system. Therefore, improvements are needed in internal control, especially in the separation of tasks, document structuring, and increased supervision.

V. CONCLUSIONS AND SUGGESTIONS

Based on the results of research and discussion of the accounting information system for cash receipts and expenditures at PDAM Tirtauli Pematangsiantar, it can be concluded that the cash receipt accounting information system has run quite well, especially in terms of recording and basic procedures. However, there are still weaknesses in the aspect of separation of duties and supervision that are not optimal, so that they have the potential to pose risks in cash management.

The cash expenditure accounting information system has also been implemented in accordance with applicable procedures, where each transaction is supported by documents and through certain processes. However, there are still shortcomings in internal control, especially related to authorization and completeness of transaction documentation that is not fully well organized.

Overall, the implementation of the accounting information system at PDAM Tirtauli Pematangsiantar has not been fully effective. This is due to the fact that there are still weaknesses in internal control, such as a lack of separation of functions, supervision that has not been maximized, and documentation that has not been orderly. This condition has the potential to pose various risks, such as recording errors, delays in the presentation of reports, and the possibility of fraud. Therefore, there is a need to improve the system to increase the effectiveness, accuracy of financial information, and strengthen internal control in cash management.

Based on the results of the research, discussion and conclusions that have been described previously, the author feels it is necessary to provide several suggestions which it is hoped can become material for consideration and input for related parties in efforts to improve the quality of the existing system. The suggestions that can be conveyed are as follows:

1. For Companies

- a) Clarify the separation of duties between sections
 - b) Improve the internal control system
 - c) Perform cash reconciliation regularly
 - d) Describes a more integrated system
2. For future researchers
Using a quantitative approach and adding variables to system effectiveness
 3. For accounting academics
 - a. Become a reference in cash AIS research
 - b. Mention the system evaluation model

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